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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/780,815
Filing Date: February 18, 2004
Appellant(s): FERGUSON, KEVIN M.

Matthew D. Rabdau
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 12/3/07 appealing from the Office action mailed 3/29/07.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

WITHDRAWN REJECTIONS

The following grounds of rejection are not presented for review on appeal because they have been withdrawn by the examiner.

The rejection of claims 1-5 under U.S.C. 101 is withdrawn.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

4,743,844 Odenheimer et al. 5-1988

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Odenheimer et al. (US Patent No. 4,743,844).

Referring to claim 1, Odenheimer et al. disclose a method of automatically setting gain and offset for the measurement and display of a signal comprising the steps of:

acquiring the signal (col. 6, lines 24-41);

defining a region of interest within the acquired signal;

determining max and min values for the acquired signal within the region of interest (col. 14, lines 47-67 to col. 15, lines 1-20);

testing the max and min values for clipping on a display (col. 15, lines 21-35);

calculating from the max and min values a gain and offset for the signal when either the max or min value clips in the testing step (col. 15, lines 36-49); and

applying the gain and offset to the signal in the acquiring step (col. 15, lines 50-68 to col. 16, lines 1-8; col. 17, lines 1-18).

As to claim 2, Odenheimer et al. disclose a method of automatically setting gain and offset for the measurement and display of a signal further comprising the step of reiterating the determining, testing; calculating and applying steps using the gain and offset from an immediately prior calculating step until a criterion is satisfied (col. 13, lines 26-68 to col. 14, lines 1-46).

Referring to claim 3, Odenheimer et al. disclose a method of automatically setting gain and offset for the measurement and display of a signal wherein the criterion comprises neither max and min value clips in the testing step (col. 15, lines 21-49).

As to claim 4, Odenheimer et al. disclose a method of automatically setting gain and offset for the measurement and display of a signal wherein the criterion comprises a number of iterations equaling a specified maximum (col. 13, lines 26-68 to col. 14, lines 1-46).

Referring to claim 5, Odenheimer et al. disclose a method of automatically setting gain and offset for the measurement and display of a signal wherein when only one of the max and min values clips in the testing step only offset is calculated in the calculating step in subsequent iterations until either both max and min values clip or neither clip (col. 15, lines 21-68 to col. 16, lines 1-8).

(10) Response to Argument

Referring to claim 1, Appellant argues that "Appellant argued over Odenheimer et al. in response to the rejection in the first office action stating that 'Odenheimer et al. fails to describe the step of defining a region of interest within the acquired signal.' In response, the final rejection refers to Fig. 7 and provides a detailed analysis of determining the maximum and minimum peak levels of the input signal, and then concludes the Odenheimer et al. 'do describe

the step of defining a region of interest within the acquired signal'. However, Fig. 7 shows step 162 describing 'SET MAIN AND WINDOW TRIGGER LEVEL TO MIN./MAX. MIDPOINT.' In an oscilloscope, it is well understood that it is the trigger that prompts the acquisition of the signal. Accordingly, the method shown at Fig. 7 in Odenheimer et al. has not even acquired a signal as yet, but has rather characterized the input signal to set a proper trigger. Furthermore, while measurements of min and max are described, there is no mention of 'defining a range of interest within the acquired signal.'"

Answer: in the Specification in the disclosure of the instant application, a region of interest within the signal is defined such as *a portion* of a video line- sync. pulse, burst pulse, active video, etc.- according to a desired measurement and the signal acquired. (Specification, page 2, lines 10-12)

Odenheimer et al. disclose "FIG. 7 is a flow chart for a program for determining the maximum and minimum peak levels of the input signal. Starting in block 150, executive microcomputer 44 determines from the history of operation of the gain adjustment algorithm of FIG. 6 whether or not the maximum (upper) peak of the waveform is small, i.e., whether it is between 0 and +4.75/2 divisions. If so, a binary search for a main trigger level substantially equal to the maximum peak level of the vertical amplifier output signal is performed (block 152) as previously described for the range of voltages corresponding to 0 to +4.75/2 vertical grid divisions. On the other hand, if the maximum peak of the vertical amplifier output signal is large, between +4.75 and 4.75/2.5 divisions, the binary search for the trigger level corresponding to such maximum peak is performed in that range (block 154). In block 156 executive microcomputer 44 determines from the history of operation of the gain adjustment algorithm

whether or not the minimum (lower) peak of the waveform is small (in a negative sense), i.e., whether it is between 0 and -4.75/2 divisions. If so, the binary search in that range is performed (block 158). If the lower peak is large (in the negative sense), i.e., between -4.75 and -4.75/2.5 divisions, the binary search for the minimum peak is performed in that range (block 160)." (col. 14, lines 47-67 to col. 15, lines 1-20)

Thus, Odenheimer et al. teach a region of interest within the acquired signals as a portion of signal falls into between 0 and +4.75/2 divisions or between +4.75 and 4.75/2.5 divisions or between 0 and -4.75/2 divisions or between -4.75 and -4.75/2.5 divisions to determine max and min values for the acquired signal within the region of interest. Otherwise stated, the region of interest as taught by Odenheimer et al. is

between 0 and +4.75/2 divisions or

between +4.75 and 4.75/2.5 divisions or

between 0 and -4.75/2 divisions or

between -4.75 and -4.75/2.5 divisions

Because this is taught as discussed above, all claim limitations are addressed and the rejection under 35 U.S.C. 102 is valid.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/TL/
Toan Le
March 28, 2008

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